

Having described the invention, the following is claimed:

1. In a device having a chamber defined by a lid and a cavity, a seal member for sealing the chamber comprising:
  - a base portion adapted to be received within a slot formed in the lid;
  - a seal portion having a substantially concave inner surface and a substantially convex outer surface; and
  - first and second flexible side walls, each of said first and second flexible side walls connected between the base portion and the seal portion,wherein said base portion, seal portion, and first and second flexible side walls define an inflatable inner cavity.
2. A seal member according to claim 1, wherein each said first and second flexible side walls includes first and second wall portions joined at a corner.
3. A seal member according to claim 1, wherein said convex outer surface includes at least one sealing edge engageable with a sealing surface surrounding the cavity.
4. A seal member according to claim 1, wherein said seal member further includes at least one port for receiving air into the inflatable inner cavity.
5. A seal member according to claim 4, wherein air pressure inside the inflatable inner cavity exerts forces that counteract external forces on the seal member, thereby maintaining a seal.
6. A seal member according to claim 5, wherein said external forces on the seal member are exerted by fluid pressure inside the chamber.
7. A seal member according to claim 1, wherein said seal member further comprises a finger for preventing fluid flow into the slot.
8. A method for operating an inflatable seal member having an inner cavity, in a device having a chamber defined by a lid and a cavity, the method comprising:

moving the lid from an open position to a closed position to enclose the cavity, wherein said inflatable seal member has an uninflated normal configuration;

locking the lid in the closed position; and

inflating the inflatable seal member, wherein said inflatable seal member assumes an inflated configuration.

9. A method according to claim 8, wherein in the inflated configuration said seal member engages at least one sealing edge with a sealing surface surrounding the cavity.

10. A method according to claim 8, wherein air is received into the inner cavity of said seal member to inflate the inflatable seal member.

11. A method according to claim 8, wherein in the inflated configuration, pressure inside the inflatable seal member exerts forces that counteract external forces on the inflatable seal member, thereby maintaining a seal.

12. A method according to claim 11, wherein said external forces on the inflatable seal member are exerted by fluid pressure inside the chamber